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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,350	09/16/2003	Susanne Dahl Thomsen	0459-0748P	2062

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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/662,350	Applicant(s) THOMSEN ET AL.	
	Examiner Jill M. Gray	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005 and 06 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 22-29 and 31-36 is/are pending in the application.
- 4a) Of the above claim(s) 27-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 22-26, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/16/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-26, modified to include claims 35 and 36 in the reply filed on June 6, 2005 is acknowledged. The traversal is on the ground(s) that claims 27-29, 31 and 32 should also belong to Group I because in both claims 1 and 27 the spin finish consists essentially of an emulsion of polysiloxanes with at least 25% of the active content being polysiloxane. This is not found persuasive because the product of Group I can be made by a materially different process.

The requirement is still deemed proper and is therefore made FINAL.

Response to Amendment

The objection to claims 23 and 25-26 under 37 CFR 1.75(c) as being in improper form is moot in view of applicants' amendments.

The rejection of claims 1, 5, 9, 18, 20-22, and 24, under 35 U.S.C. 112, second paragraph is moot in view of applicants' amendments.

The rejection of claims 1, 7-14, 17, and 22 under 35 U.S.C. 102(b) as being anticipated by Asanuma et al, 5,478,646 is moot in view of applicants' amendments.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-19, 22-26 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asanuma et al, 5,478,646 (Asanuma) in view of Gupta et al, 6,177,191 B1 (Gupta) and Schmalz 4,938,832.

Asanuma and Gupta are each as applied previously, wherein Gupta teaches polypropylene fibers that can have a finish applied thereto, wherein the finish can be a polysiloxane or a composition of the type taught by Schmalz, 4,938,832, (note column 11, lines 4-21 and Examples 1A and 1B) but do not specifically teach that the finish has at least 25% of the active content being polysiloxane. Schmalz teaches a method for preparing a polyolefin containing fiber for processing comprising treating the fiber with a composition comprising a neutralized phosphoric acid ester and up to about 30% by weight of at least one polysiloxane, crimping the fiber and applying a second composition comprising about 70 to 100% by weight of at least one polysiloxane and up to about 30% by weight of a neutralized phosphoric acid ester, processing the treated fiber and forming into a web. See column 2, lines 10-54.

Though Asanuma and Gupta are silent as to at least 25% of the active content being polysiloxane, as set forth above, Gupta teaches that compositions of the type taught by Schmalz can be used. Accordingly, the combined teachings of Gupta and Schmalz would have rendered obvious coating the polypropylene fibers of Asanuma with a finish consisting essentially of a polysiloxane with at least 25% of the active content being polysiloxane. As to the fiber/fiber friction, because the prior art teaches the inclusion of a polysiloxane having the requisite amount of active content of polysiloxane, the examiner has reason to believe that fiber/fiber friction of the prior art would be within the ranges contemplated by applicants.

Therefore, the combined teachings of Asanuma, Gupta and Schmalz would have rendered obvious the invention as claimed in present claims 1-19, 22-26, and 35-36.

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4. Claims 1-19, 22-26 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asanuma et al, 5,478,646 (Asanuma) as applied above to claims 1-19, 22-26, and 35-36 in view of Evans et al, 6,171,515 B1 (Evans).

Asanuma is as set forth above but does not teach applying a spin finish to his fibers. Evans teaches a fiber treatment composition containing siloxanes that can be applied to fibers such as polyethylene and polypropylene. See abstract and column 7, lines 39-40. In addition, Evans teaches that the emulsion typically contains 2 to 80% of active ingredients and is applied to the fibers in an amount of 0.1 to 15 wt%. See column 6, lines 49-50 and column 7, lines 60-94. It would have been obvious to modify the fibers taught by Asanuma by applying a fiber treating composition as taught by Evans with the reasonable expectation of providing resistance to yellowing and imparting good hand to the fibers. As to the fiber/fiber friction, bulk, and resilience, Evans teaches adding the fiber treatment composition in amounts contemplated by applicants, wherein said fiber treatment is substantially similar to that of applicants. Accordingly, the examiner has reason to believe that properties such as the fiber/fiber friction, bulk, and resilience are within the present claimed range.

Therefore, the combined teachings of Asanuma and Evans would have rendered obvious the invention as claimed in present claims 1-19, 22-26, and 35-36.

Response to Arguments

5. Applicant's arguments filed January 5, 2005 have been fully considered but they are not persuasive.

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Applicants argue that Gupta teaches the use of an internal hydrophobic polysiloxane for the purpose of rendering polyolefin fibers more hydrophobic. However, the polysiloxane spin finish of the present invention is an external spin finish and it serves the purpose of rendering a higher bulk in the corresponding nonwovens. Applicants further argue that Gupta does not teach that the use of an external polysiloxane spin finish may achieve a higher bulk in corresponding nonwovens, and in fact teaches away from applying external silicone finishes.

Agreeably Gupta teaches the use of an internal hydrophobic polysiloxane. Nevertheless, in Examples 1A and 1B he clearly applies as spin finish to the resultant fibers. This teaches clearly establishes the general level of knowledge and skill in the art at the time the invention was made, namely, that the application of polysiloxane spin finish compositions to polyolefin fibers was known. As to teaching away from the present invention, Gupta at columns 10 and 11 teaches that various embodiments include the application of spin finishes to the fibers. In response to applicant's argument that Gupta applies his spin finish for a different purpose, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

No claims are allowed.

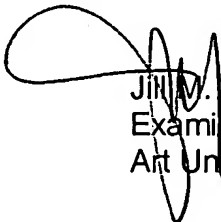
Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jill M. Gray
Examiner
Art Unit 1774

jmg